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Tri-Community Flooding Group Minutes 09/14/2010

Tri-Community Working Group Meeting Minutes -- 9/14/2010

Tonight's meeting of the Tri-Community Working Group for Flooding issues was held at 6:00 pm, in the second-floor meeting room of Arlington Town Hall.

Attending:

Roger Frymire
Owen O'Riordan
Mike Rademacher
Steve Revilak
Clarissa Rowe
Catherine Daly-Woodbury

Corrections to Past Meeting Minutes

No corrections to the 5/11/2010 minutes were offered.

AECOM/DCR Alewife Brook Bathymetry and Sediment Study

Steve Revilak obtained copies of a DCR document titled Alewife Brook Bathymetry and Sediment Study, which was prepared by AECOM and published in April 2010. For this study, AECOM took a series of sediment core samples from the Alewife Brook, leading up to the confluence of the Mystic River. Below are excerpts from the study's Executive Summary, which outline AECOM's findings:

AECOM's bathymetric survey determined that this section of Alewife Brook has a relatively uniform stream bottom with an average water depth of 1.9 feet and a maximum depth of 3.5 feet ... The sediment survey revealed deposits of soft sediment throughout this reach of Alewife Brook with an average soft sediment thickness of 1.7 feet ... [and] a soft sediment volume of 8,500 cubic yards.

Chemical analysis results indicate that the fine-grained organic sediment in Alewife Brook contains concentrations of some metals and petroleum related pollutants that exceeded Massachusetts Contingency Plan S-1 standards and Massachusetts Department of Environmental Protection background levels. AECOM recommends conducting additional sediment quality analysis to further characterize the extent and distribution of chemical pollutants in the Alewife Brook.

This evening's first topic centered around discussion of the AECOM/DCR study.

Clarissa Rowe recalled an earlier study of Alewife Brook (done in the 1980's?). This study found high concentrations of heavy metals in Alewife Brook, but not elevated levels of petroleum or hydrocarbons. The group agreed that it would be beneficial to find someone who could give a professional interpretation of the test results. Mike Rademacher stated that one of his colleagues may be able to provide such an interpretation.

The group discussed the dredging of Alewife Brook as a possible avenue for remediation. To be effective, a dredging project should start further upstream -- possibly extending from the Alewife T station to the confluence of the Mystic River. It would be preferable to combine dredging with some form of flood mitigation project, perhaps in cooperation with the DCR and/or EPA.

Catherine Daly-Woodbury stated that dredging alone might have little benefit for flood mitigation. Although the stream bed would be lower, flood waters will still seek a level height. Roger Frymire stated that dredging could provide some flood benefit, if it removes

sediment that's obstructing water flow (e.g., the sand and gravel bar at the Broadway Bridge).

Clarissa Rowe believes that we need to get an understanding of how much a dredging project would cost, in order to see if such a project would be feasible.

The group hopes that the DCR's Greenway project will raise public awareness of Alewife Brook's poor water quality, and that increased public awareness can be a catalyst for improvement. The group also thought it would be beneficial to have signs warning people about the Alewife's water quality. These could be modeled after existing signage in the Thorndike field area. The DCR's Alewife Master plan also recognizes the need for signage to inform the public of water quality.

Roger Frymire reported a large clog of tree debris in the Alewife, about 100' upstream of the Mass. Ave. Bridge. Mike Rademacher will bring this to the attention of the DCR/DOT construction workers.

MWRA Presentation for November Meeting

Clarissa Rowe suggested inviting representatives from the MWRA and the City of Cambridge to our November meeting, to present their project for cleaning up Alewife Brook. Owen O'Riordan asked to postpone this presentation until a Notice to Proceed has been given to the project contractors.

Other Business

Rep. Brownberger has been trying to obtain information about FEMA flood remediation programs. Remediation could be beneficial, even if only applied to the handful of homes that are most frequently flooded (e.g., sections of east Arlington). Clarissa Rowe will contact Rep. Brownberger for an update. Perhaps our November meeting could include a discussion about household help programs.

Roger Frymire noticed that the Broadway USGS gauge experienced a failure during late August. The failure was reported to the USGS, and the gauge was repaired a few days later.

Roger Frymire has begun making time-lapse movies of Kayak trips around local waterways. Roger will provide links to some of these movies.

The meeting adjourned at 7:08pm.